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| APPLICATION NO.        | FILING DATE                           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|---------------------------------------|----------------------|---------------------|------------------|
| 10/621,843             | 07/16/2003                            | Shinji Matsushita    | 03418/LH            | 1800             |
|                        | 7590 09/25/2007<br>OLTZ, GOODMAN & CH | EXAMINER             |                     |                  |
| 220 Fifth Avenue       |                                       |                      | YODER III, CHRISS S |                  |
| 16TH Floor<br>NEW YORK | TH Floor<br>EW YORK, NY 10001-7708    |                      | ART UNIT            | PAPER NUMBER     |
|                        |                                       |                      | 2622                |                  |
|                        |                                       |                      |                     |                  |
|                        |                                       |                      | MAIL DATE           | DELIVERY MODE    |
|                        |                                       |                      | 09/25/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.  | Applicant(s)   |  |  |  |
|---|--|--|--|--|--|
|   | 10/621,843   | MATSUSHITA, SHINJI   |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |
|   | Chriss S. Yoder, III   | 2622   |  |  |  |
| The MAILING DATE of this communication a Period for Reply   | 1  | l l  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perior  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICA<br>1.136(a). In no event, however, may a repl<br>at will apply and will expire SIX (6) MONTH<br>ute, cause the application to become ABAN   | ATION.  ly be timely filed  AS from the mailing date of this communication.  NDONED (35 U.S.C. § 133). |  |  |  |
| Status  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on <u>05</u>  | July 2007.   |  |  |  |  |
| ·   | , <del>_</del>   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |  |
| closed in accordance with the practice under  | r Ex parte Quayle, 1935 C.D.   | 11, 453 O.G. 213.  |  |  |  |
| Disposition of Claims   |  |  |  |  |  |
| 4)  Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) is/are withdreds 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-18 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and   | rawn from consideration.   |  |  |  |  |
| Application Papers  |  |  |  |  |  |
| 9) ☐ The specification is objected to by the Examination 10) ☑ The drawing(s) filed on 12 December 2003 is Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the I  | dare: a)⊠ accepted or b)⊡ cone drawing(s) be held in abeyance ection is required if the drawing(s)   | e. See 37 CFR 1.85(a).<br>) is objected to. See 37 CFR 1.121(d).                                       |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreignal All b) Some * c) None of:</li> <li>1. Certified copies of the priority docume</li> <li>2. Certified copies of the priority docume</li> <li>3. Copies of the certified copies of the prapplication from the International Bure</li> <li>* See the attached detailed Office action for a list</li> </ul>   | nts have been received.  nts have been received in Application of the property | olication No eceived in this National Stage  |  |  |  |
| Attachment(s)   |  |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)         Paper No(s)/Mail Date     </li> </ol>  | Paper No(s)/   | mmary (PTO-413) Mail Date bring Patent Application .   |  |  |  |

Office Action Summary

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## **DETAILED ACTION**

## Response to Arguments

Applicant's arguments filed July 5, 2007 have been fully considered but they are not persuasive.

Applicant argues, with respect to claims 1 and 10, that Sannoh et al. does not disclose, teach or suggest displaying photograph information about a (current) observation image which has already been captured and is being displayed on a display, superimposed on that observation image itself. Instead, Sannoh et al. merely discloses placing a target mark indicative of the focus status of a viewed, uncaptured image for the purpose of facilitating subsequent capture of the image when it is in focus. And that the photograph advisability information as embodied by the target mark in Sannoh et al. is fundamentally different from the photograph information of the claimed present invention. However, the Examiner notes, that inherently for an image to be displayed, it has to be captured prior to the display of the image on the LCD of the camera (an image cannot be displayed without capturing the image). Sannoh et al. discloses the process of 1) capturing an image, 2) superimposing the target mark on the captured image, and 3) displaying the synthesized image. Therefore, Sannoh et al. is considered to be superimposing the photograph information on a captured image.

Applicant also argues, with respect to the depending claims 2, 4, 11, and 13, that Sannoh et al does not disclose, teach or suggest various features of dependent claims. For example, Sannoh et al does not disclose, teach or suggest setting line color, line width and/or line type to maintain a visual recognition of the display photograph

information. However, the Examiner points out that Sannoh discloses changing the color of the displayed photograph information in order to distinguish the photographic characteristics of the captured image and inform the user (paragraph 0044).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sannoh et al. (US PGPub # 2002/0149689).
- 2. In regard to claim 1, note Sannoh discloses the use of an imaging device, comprising an electronic camera which images an observation image (paragraph 0030 and figure 1), a display which displays the observation image imaged by the electronic camera (paragraph 0042 and figure 1:17), and a display setting portion which sets display items of photograph information relating to the observation image, and which displays the photograph information superimposed on the observation image (paragraphs 0041-0042).

Therefore, it can be seen that Sannoh fails to disclose that the imaging device is used with a microscope. Official Notice is taken that the concepts and advantages of using a digital camera with a microscope are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to

modify the Sannoh device to be used in conjunction with a microscope in order to provide a real time display of microscopic objects to more than one user through the use of a display means as well as allowing the storage of a permanent copy of the observed image by recording the captured data.

Additionally, the well known use of an imaging device in conjunction with a microscope in order to provide a real time display of microscopic objects to more than one user through the use of a display means as well as allowing the storage of a permanent copy of the observed image by recording the captured data, is now taken to be admitted prior art because Applicant failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made. See MPEP §2144.03.

- 3. In regard to claim 2, note Sannoh discloses that the display setting portion sets at least one of a line color, a line width and a line type as the display items to maintain a visual recognition property of the photograph information for the observation image (paragraph 0044).
- 4. In regard to claim 3, note Sannoh discloses that the photograph information of the observation image includes at least one of a photometry, a focus, a color balance and a scale (paragraph 0043).
- 5. In regard to claim 4, note Sannoh discloses that the display setting portion sets at least one of a line color, a line width and a line type as the display items to maintain a visual recognition property of the photograph information for the observation image (paragraph 0044).

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6. In regard to claim 5, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information and adjusts the color of the photograph information (paragraph 0044). Therefore, it can be seen that Sannoh fails to disclose the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the observation image. Official Notice is taken that the concepts and advantages of using a complementary color generator to adjust the color of data that is to be displayed along with the image based on the color of the background of the image are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the observation image in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color.

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Additionally, the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the observation image in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color, is now taken to be admitted prior art because Applicant failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made. See MPEP §2144.03.

7. In regard to claims 6-7, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information, as claimed in claim 1 above. Therefore, it can be seen that the Sannoh device lacks the use of a color determination unit which determines a color for each one pixel of a background image of the observation image, a histogram computing unit which computes a histogram for each color determined by the color determination unit, and that the display setting portion sets a display color of a plurality of sets of the photograph information based on the computed histogram. Official Notice is taken that the concepts and advantages of using a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image in order to adjust the display color of photograph information are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image to adjust the display color of photograph information in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color.

Additionally, the use of a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image to adjust the display color of photograph information in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color, is now taken to be admitted prior art because Applicant

failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made. See MPEP §2144.03.

- 8. In regard to claim 8, note Sannoh discloses the use of a display pattern generator which generates a pattern for displaying a plurality of sets of the photograph information (paragraph 0044).
- 9. In regard to claim 9, note Sannoh discloses the use of a display pattern memory which stores a predetermined display pattern as a table (paragraph 0033 and 0051, and figure 3).
- 10. In regard to claim 10, note Sannoh discloses the use of an imaging device comprising an electronic camera which images an observation image captured (paragraph 0030 and figure 1), and a display which displays the observation image imaged by the electronic camera and a plurality of sets of photograph information relating to the observation image, and with displays the plurality of sets of photograph information superimposed on the observation image (paragraph 0042-0044 and figure 1:17).

Therefore, it can be seen that Sannoh fails to disclose that the imaging device is used with a microscope. Official Notice is taken that the concepts and advantages of using a digital camera with a microscope are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to be used in conjunction with a microscope in order to provide a real time display of microscopic objects to more than one user through the

use of a display means as well as allowing the storage of a permanent copy of the observed image by recording the captured data.

Additionally, the well known use of an imaging device in conjunction with a microscope in order to provide a real time display of microscopic objects to more than one user through the use of a display means as well as allowing the storage of a permanent copy of the observed image by recording the captured data, is now taken to be admitted prior art because Applicant failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made. See MPEP §2144.03.

- 11. In regard to claim 11, note Sannoh discloses that at least one of a line color, a line width and a line type displayed on the display of the plurality of sets of photograph information is settable (paragraph 0044).
- 12. In regard to claim 12, note Sannoh discloses that the plurality of sets of the photograph information includes at least one of a photometry, a focus, a color balance and a scale (paragraph 0043).
- 13. In regard to claim 13, note Sannoh discloses that at least one of a line color, a line width and a line type displayed on the display of the plurality of sets of photograph information is settable (paragraph 0044).
- 14. In regard to claim 14, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information and adjusts the color of the photograph information (paragraph 0044). Therefore, it can be seen that Sannoh fails to disclose the use of a complementary color generator which sets a display color

of the photograph information to a complementary color of a background image of the observation image. Official Notice is taken that the concepts and advantages of using a complementary color generator to adjust the color of data that is to be displayed along with the image based on the color of the background of the image are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the observation image in order to prevent the photograph information from disappearing in the image in case when the image background and the photograph information are the same color.

Additionally, the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the observation image in order to prevent the photograph information from disappearing in the image in case when the image background and the photograph information are the same color, is now taken to be admitted prior art because Applicant failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made. See MPEP §2144.03.

15. In regard to claims 15-16, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information, as claimed in claim 1 above. Therefore, it can be seen that the Sannoh device lacks the use of a color determination unit which determines a color for each one pixel of a background image of the observation image, a histogram computing unit which computes a

histogram for each color determined by the color determination unit, and that the display controller which sets a display color of the plurality of sets of the photograph information based on the computed histogram. Official Notice is taken that the concepts and advantages of using a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image in order to adjust the display color of photograph information are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image to adjust the display color of photograph information in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color.

Additionally, the use of a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image to adjust the display color of photograph information in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color, is now taken to be admitted prior art because Applicant failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made. See MPEP §2144.03.

16. In regard to claim 17, note Sannoh discloses the use of a display pattern generator which generates a pattern used to display the plurality of sets of the photograph information (paragraph 0044).

17. In regard to claim 18, note Sannoh discloses the use of a display pattern memory which stores a predetermined display pattern as a table (paragraph 0044).

## Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (571) 272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CSY September 17, 2007

TUAN HO
PRIMARY EXAMINER